

IN THE CLAIMS:

Please cancel claims 1-36 and add the following new claims 37-50:

37. (New) An immunogenic composition comprising:

(a) a peptide consisting essentially of a tau amino acid sequence selected from the group consisting of

- C1
- (i) Lys-Glu-Ser-Pro-Leu-Gln (residues 44-49 in SEQ ID NO:1),
 - (ii) Tyr-Ser-Ser-Pro-Gly-Ser-Pro (residues 197-203 in SEQ ID NO:1),
 - (iii) Pro-Gly-Ser-Pro-Gly-Thr (residues 200-205 in SEQ ID NO:1),
 - (iv) Tyr-Ser-Ser-Pro-Gly-Ser-Pro-Gly-Thr-Pro-Gly-Ser (residues 197-208 in SEQ ID NO:1),
 - (v) Pro-Lys-Ser-Pro-Ser-Ser (residues 233-238 in SEQ ID NO:1),
 - (vi) Gly-Asp-Thr-Ser-Pro-Arg-His (residues 401-407 in SEQ ID NO:1),
 - (vii) Met-Val-Asp-Ser-Pro-Gln-Leu (residues 419-425 in SEQ ID NO:1),
 - (viii) Pro-Leu-Gln-Thr-Pro-Thr-Glu (residues 47-53 in SEQ ID NO:1),
 - (ix) Leu-Lys-Glu-Ser-Pro-Leu-Gln-Thr-Pro-Thr-Glu-Asp (residues 43-54 in SEQ ID NO:1),
 - (x) Ala-Lys-Ser-Thr-Pro-Thr-Ala (residues 66-72 in SEQ ID NO:1),
 - (xi) Ile-Gly-Asp-Thr-Pro-Ser-Leu (residues 108-114 in SEQ ID NO:1),
 - (xii) Lys-Ile-Ala-Thr-Pro-Arg-Gly-Ala (residues 150-157 in SEQ ID NO:1),
 - (xiii) Pro-Ala-Lys-Thr-Pro-Pro-Ala (residues 172-178 in SEQ ID NO:1),
 - (xiv) Ala-Pro-Lys-Thr-Pro-Pro-Ser (residues 178-184 in SEQ ID NO:1),
 - (xv) Pro-Ala-Lys-Thr-Pro-Pro-Ala-Pro-Lys-Thr-Pro-Pro-Ser (residues 172-184 in SEQ ID NO:1),

- (xvi) Ser-Pro-Gly-Thr-Pro-Gly-Ser (residues 202-208 in SEQ ID NO:1),
- (xvii) Arg-Ser-Arg-Thr-Pro-Ser-Leu (residues 209-215 in SEQ ID NO:1),
- (xviii) Ser-Leu-Pro-Thr-Pro-Pro-Thr (residues 214-220 in SEQ ID NO:1),
- (xix) Arg-Ser-Arg-Thr-Pro-Ser-Leu-Pro-Pro-Thr-Pro-Pro-Thr (residues 209-220 in SEQ ID NO:1),
- (xx) Val-Val-Arg-Thr-Pro-Pro-Lys (residues 228-234 in SEQ ID NO:1),
- (xxi) Val-Val-Arg-Thr-Pro-Pro-Lys-Ser-Pro-Ser-Ser-Ala (residues 228-239 in SEQ ID NO:1),
- (xxii) Lys-Ile-Gly-Ser-Thr-Glu-Asn-Leu-Lys (residues 259-267 in SEQ ID NO:1),
- (xxiii) Lys-Cys-Gly-Ser-Lys-Asp-Asn-Ile-Lys (residues 290-298 in SEQ ID NO:1),
- (xxiv) Lys-Cys-Gly-Ser-Leu-Gly-Asn-Ile-His (residues 321-329 in SEQ ID NO:1), and
- (xxv) Lys-Ile-Gly-Ser-Leu-Asp-Asn-Ile-Thr-His. (residues 353-362 in SEQ ID NO:1); and

- (b) a carrier molecule, wherein the carrier molecule induces or enhances an immune response to the peptide of (a).

38. (New) The immunogenic composition of claim 37, wherein the tau amino acid sequence is selected from the group consisting of

- (a) Lys-Ile-Gly-Ser-Thr-Glu-Asn-Leu-Lys (residues 259-267 in SEQ ID NO:1);
- (b) Lys-Cys-Gly-Ser-Lys-Asp-Asn-Ile-Lys (residues 290-298 in SEQ ID NO:1);
- and
- (c) Lys-Cys-Gly-Ser-Leu-Gly-Asn-Ile-His (residues 321-329 in SEQ ID NO:1).

39. (New) The immunogenic composition of claim 38, wherein the tau amino acid sequence is Lys-Ile-Gly-Ser-Thr-Glu-Asn-Leu-Lys (residues 259-267 in SEQ ID NO:1).
40. (New) The immunogenic composition of claim 37, wherein the peptide comprises a phosphorylated serine.
41. (New) The immunogenic composition of claim 37, wherein the peptide comprises a phosphorylated threonine.
42. (New) The immunogenic composition of claim 39, wherein the Ser (residue 262 of SEQ ID NO:1) is phosphorylated.
43. (New) The immunogenic composition of claim 37, wherein the peptide of (a) is conjugated to the carrier molecule.
44. (New) A method of producing an antibody to a tau peptide, the method comprising administering to an animal an antibody-producing amount of an immunogenic composition comprising:
- (a) a peptide consisting essentially of a tau amino acid sequence selected from the group consisting of
- (i) Lys-Glu-Ser-Pro-Leu-Gln (residues 44-49 in SEQ ID NO:1),
 - (ii) Tyr-Ser-Ser-Pro-Gly-Ser-Pro (residues 197-203 in SEQ ID NO:1),
 - (iii) Pro-Gly-Ser-Pro-Gly-Thr (residues 200-205 in SEQ ID NO:1),
 - (iv) Tyr-Ser-Ser-Pro-Gly-Ser-Pro-Gly-Thr-Pro-Gly-Ser (residues 197-208 in SEQ ID NO:1),
 - (v) Pro-Lys-Ser-Pro-Ser-Ser (residues 233-238 in SEQ ID NO:1),
 - (vi) Gly-Asp-Thr-Ser-Pro-Arg-His (residues 401-407 in SEQ ID NO:1),

- (vii) Met-Val-Asp-Ser-Pro-Gln-Leu (residues 419-425 in SEQ ID NO:1),
- (viii) Pro-Leu-Gln-Thr-Pro-Thr-Glu (residues 47-53 in SEQ ID NO:1),
- (ix) Leu-Lys-Glu-Ser-Pro-Leu-Gln-Thr-Pro-Thr-Glu-Asp (residues 43-54 in SEQ ID NO:1),
- (x) Ala-Lys-Ser-Thr-Pro-Thr-Ala (residues 66-72 in SEQ ID NO:1),
- (xi) Ile-Gly-Asp-Thr-Pro-Ser-Leu (residues 108-114 in SEQ ID NO:1),
- (xii) Lys-Ile-Ala-Thr-Pro-Arg-Gly-Ala (residues 150-157 in SEQ ID NO:1),
- (xiii) Pro-Ala-Lys-Thr-Pro-Pro-Ala (residues 172-178 in SEQ ID NO:1),
- (xiv) Ala-Pro-Lys-Thr-Pro-Pro-Ser (residues 178-184 in SEQ ID NO:1),
- (xv) Pro-Ala-Lys-Thr-Pro-Pro-Ala-Pro-Lys-Thr-Pro-Pro-Ser (residues 172-184 in SEQ ID NO:1),
- (xvi) Ser-Pro-Gly-Thr-Pro-Gly-Ser (residues 202-208 in SEQ ID NO:1),
- (xvii) Arg-Ser-Arg-Thr-Pro-Ser-Leu (residues 209-215 in SEQ ID NO:1),
- (xviii) Ser-Leu-Pro-Thr-Pro-Pro-Thr (residues 214-220 in SEQ ID NO:1),
- (xix) Arg-Ser-Arg-Thr-Pro-Ser-Leu-Pro-Pro-Thr-Pro-Pro-Thr (residues 209-220 in SEQ ID NO:1),
- (xx) Val-Val-Arg-Thr-Pro-Pro-Lys (residues 228-234 in SEQ ID NO:1),
- (xxi) Val-Val-Arg-Thr-Pro-Pro-Lys-Ser-Pro-Ser-Ser-Ala (residues 228-239 in SEQ ID NO:1),
- (xxii) Lys-Ile-Gly-Ser-Thr-Glu-Asn-Leu-Lys (residues 259-267 in SEQ ID NO:1),
- (xxiii) Lys-Cys-Gly-Ser-Lys-Asp-Asn-Ile-Lys (residues 290-298 in SEQ ID NO:1),

- (xxiv) Lys-Cys-Gly-Ser-Leu-Gly-Asn-Ile-His (residues 321-329 in SEQ ID NO:1), and
- (xxv) Lys-Ile-Gly-Ser-Leu-Asp-Asn-Ile-Thr-His. (residues 353-362 in SEQ ID NO:1); and
- (b) a carrier molecule, wherein the carrier molecule induces or enhances an immune response to the peptide of (a).
45. (New) The method of claim 44, wherein the tau amino acid sequence is selected from the group consisting of
- (a) Lys-Ile-Gly-Ser-Thr-Glu-Asn-Leu-Lys (residues 259-267 in SEQ ID NO:1);
- (b) Lys-Cys-Gly-Ser-Lys-Asp-Asn-Ile-Lys (residues 290-298 in SEQ ID NO:1);
- and
- (c) Lys-Cys-Gly-Ser-Leu-Gly-Asn-Ile-His (residues 321-329 in SEQ ID NO:1).
46. (New) The method of claim 45, wherein the tau amino acid sequence is Lys-Ile-Gly-Ser-Thr-Glu-Asn-Leu-Lys (residues 259-267 in SEQ ID NO:1).
47. (New) The method of claim 44, wherein the peptide comprises a phosphorylated serine.
48. (New) The method of claim 44, wherein the peptide comprises a phosphorylated threonine.
49. (New) The method of claim 46, wherein the Ser (residue 262 of SEQ ID NO:1) is phosphorylated.
50. (New) The method of claim 44, wherein the peptide of (a) is conjugated to the carrier molecule.